

# The Sudden Unexplained Infant Death Initiative

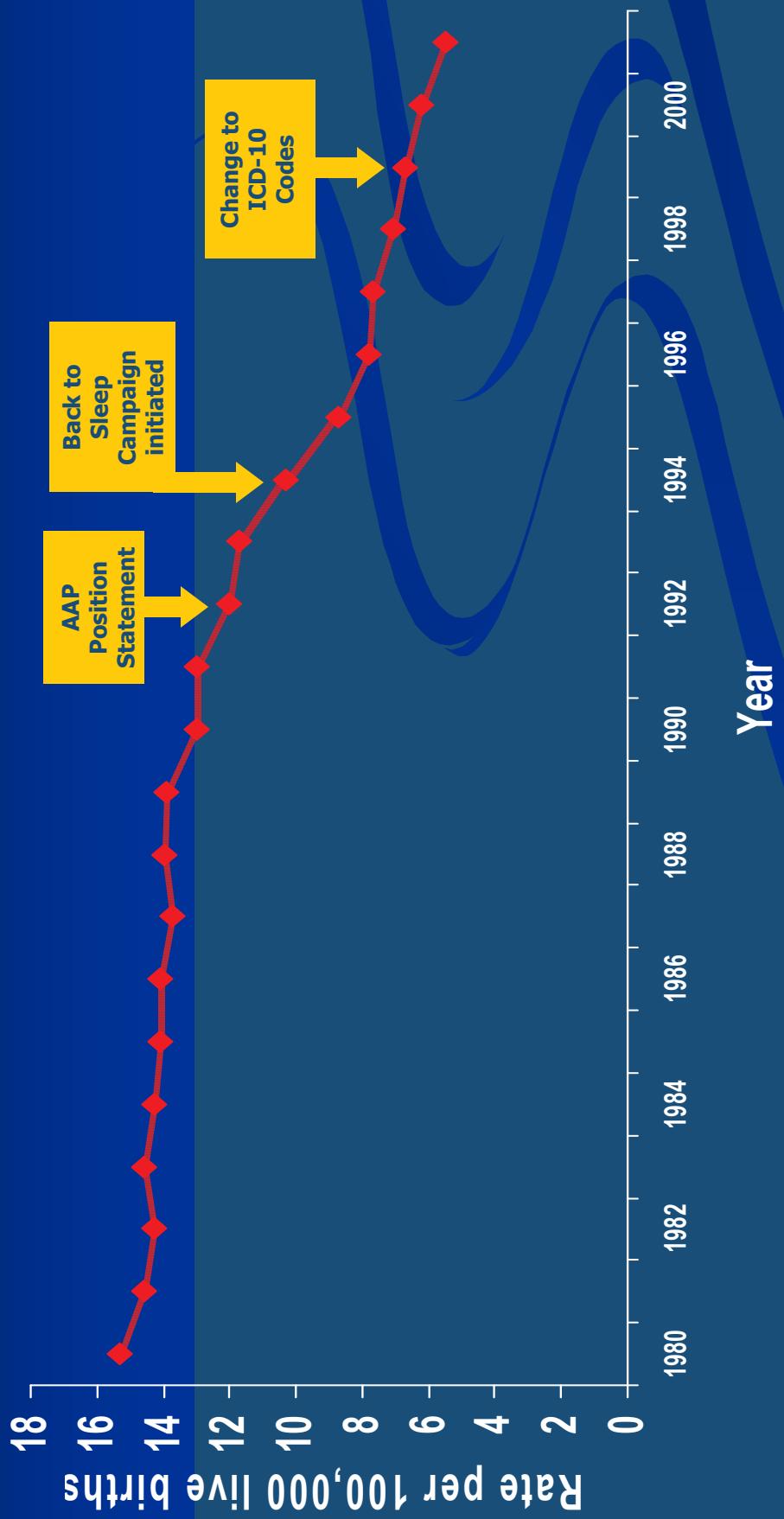


# Sudden Infant Death Syndrome (SIDS)

“Sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history.”

\* Willinger M, James LS, Catz C. Pediatr Pathol 1991; 11(5):677-684

# Mortality Rates Due to SIDS, U.S., 1980-2001



# Characteristics of SIDS

- SIDS occurs suddenly without warning, often during periods of sleep
- Cause unknown after thorough investigation and autopsy
- Not due to suffocation, aspiration, abuse or neglect
- Peak incidence at 2 to 4 months of age

# Risk Factors

- Young maternal age
- High parity
- Late or no prenatal care
- Low birth weight and preterm birth
- Prenatal maternal smoking and substance abuse
- Postnatal exposure cigarette smoke

# Modifiable Risk Factors

- Prone and side sleep positions
- Overheating
- Soft sleep surfaces
  - Loose bedding
  - Sharing a sleep surface

# Sudden, Unexplained Infant Deaths (SUID)

- Suffocation (overlaying, choking, and wedging)
- Infection (sepsis, pneumonia)
- Metabolic and genetic causes
- Neglect or homicide
- Intoxication, poisoning
- Hypothermia, hyperthermia
- Central nervous system causes
- SIDs

# Impact Of SIDS and SUID

## SIDS

- 2500 SIDS deaths per year
- Third leading cause of infant mortality
- Leading cause of postneonatal mortality

## SUID

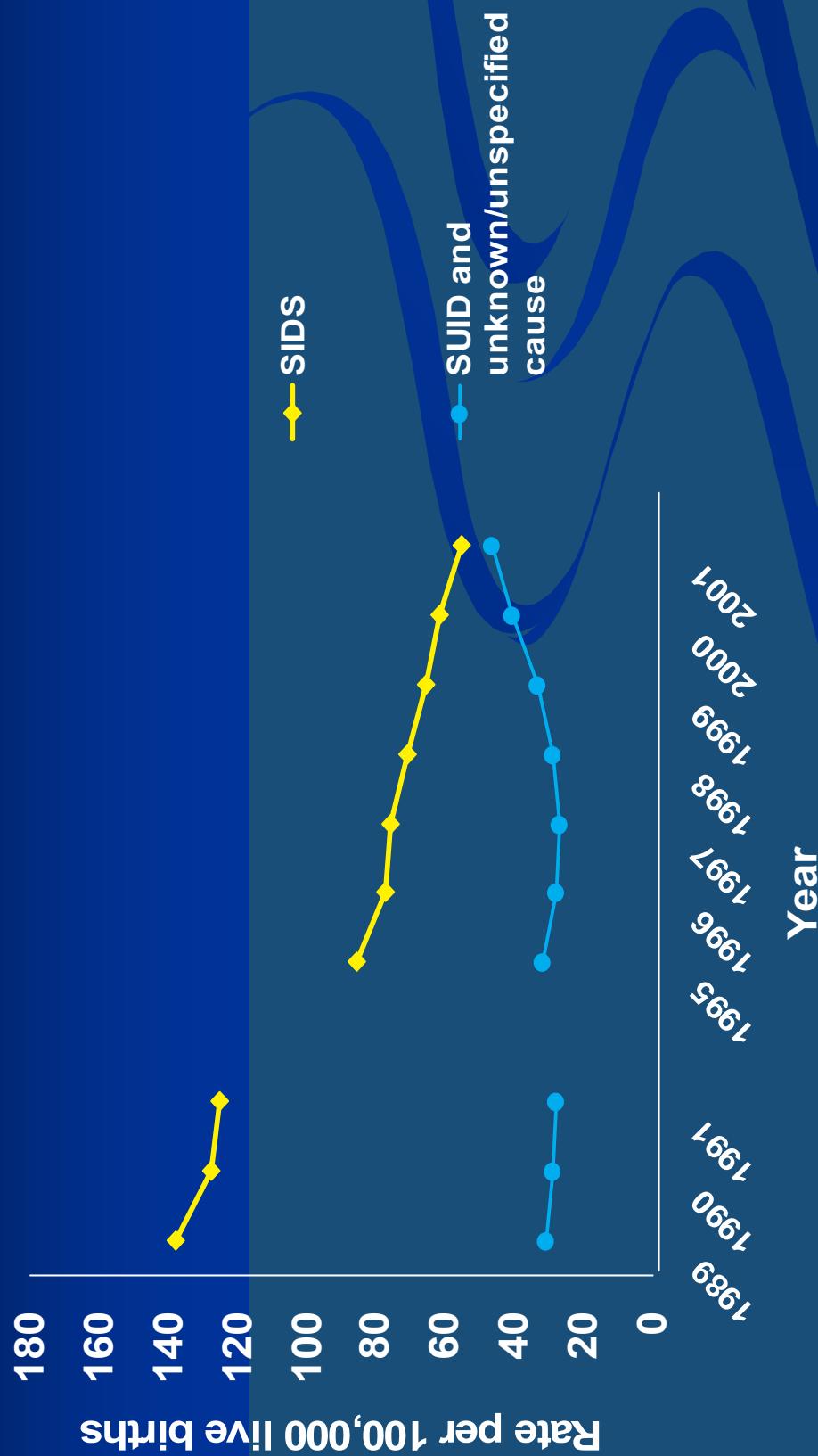
- 4600 SUID deaths per year
- Accidental suffocation & strangulation doubled in last decade

# CDC Research

- Evidence supports change in reporting & classification of SUID in late 1990's
- Recent decline in SIDS offset by:
  - ↑ unknown and unspecified causes
  - ↑ other SUID causes

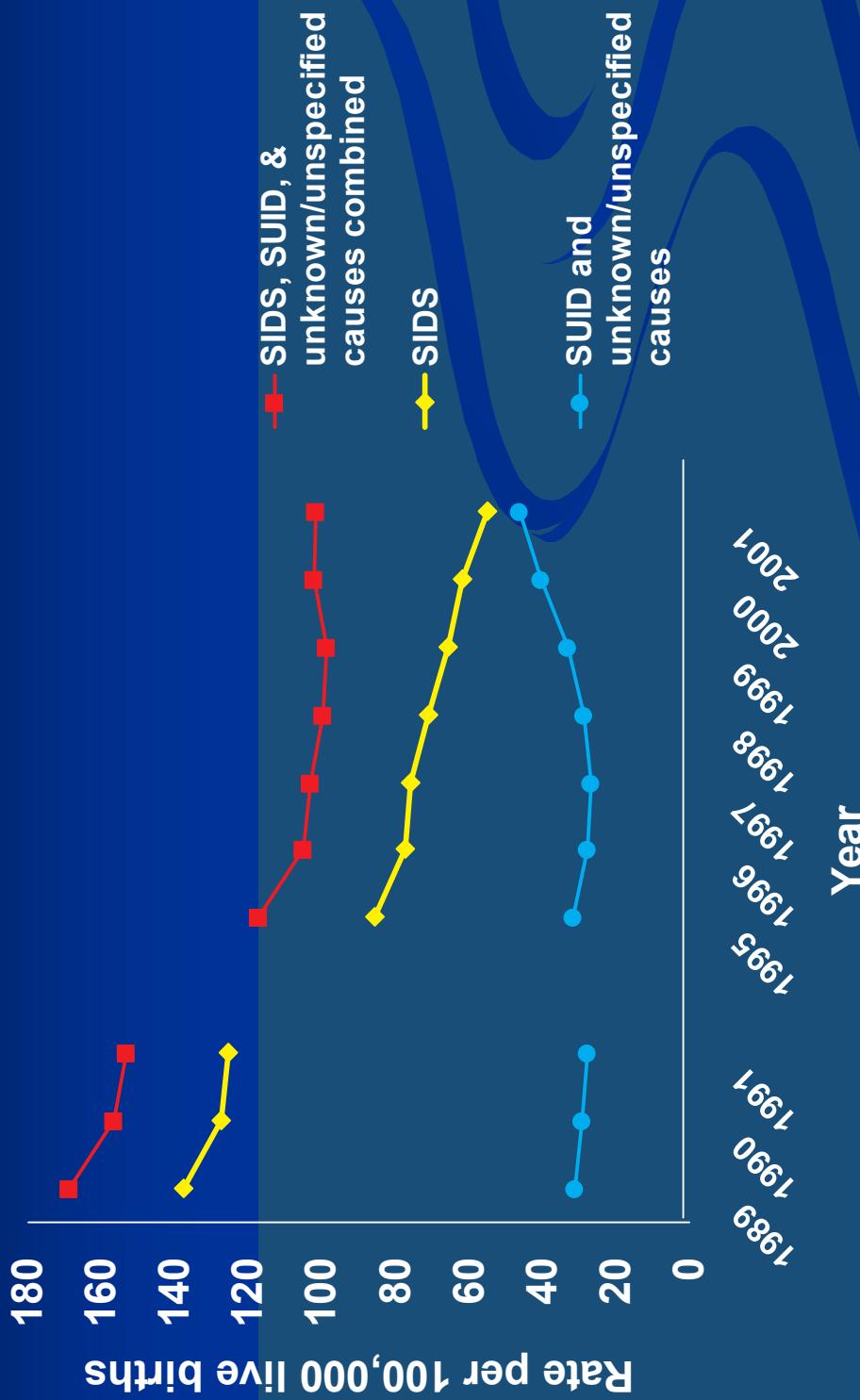
Shapiro-Mendoza CK, Tomashek K, et. al. American Journal of Epidemiology. 2006; 163: 762-769.

# Infant Mortality Rates Due to SIDS, SUID\*, and Unknown/Unspecified Causes, U.S., 1989–1991 and 1995–2001



\* SUID include accidental suffocation and strangulation in bed; other accidental suffocation and strangulation; and neglect, abandonment and other maltreatment syndromes.

# Infant Mortality Rates Due to SIDS, SUID\*, and Unknown/Unspecified Causes, U.S., 1989–1991 and 1995–2001



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# Importance of Diagnosis and Reporting

Hinders our ability to

- Monitor trends in SUID
- Conduct research to identify risk factors
- Design interventions to prevent SUID
- Evaluate programs aimed at prevention

# Importance of Investigating SUID

Without a complete death scene investigation

- Makes it difficult to determine cause and manner-of-death
- Places pathologist conducting autopsy at disadvantage
- Places those trying court cases at disadvantage
- Hinders prevention efforts

# Goals of CDC's SUID Initiative

- Standardize and improve data collection at death scene
- Promote consistent diagnosis and reporting of cause of death
- Improve and standardize reporting on death certificate
- Prevent SUID by using improved data to identify those at risk

# SUID Initiative Main Activities

- Developed the Sudden, Unexplained Infant Death Investigation (SUIDI) Reporting Form
- Developed training curriculum and materials for death scene investigation
- Disseminating the SUIDI Reporting Form and training materials
- Promoting use of SUIDI Reporting Form and training materials

# Training Materials

- Training Text
- Student Note Taking Guide
- Curriculum / Instructor Guide
- Instructional DVD
- On-Line Training
- Testing for national certification

# SUIDI Reporting Form

INVESTIGATION DATA											
Infant's Information:	Last _____	First _____	M _____	Case # _____							
Sex: <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	Date of Birth _____	Month / Day / Year	Age Months _____	SS# _____							
Race: <input type="checkbox"/> White <input type="checkbox"/> Black/African Am. <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Am. Indian/Alaskan Native <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Other											
Infant's Primary Residence Address: Address:	City _____	County _____	State _____	Zip _____							
Incident Address: Address:	City _____	County _____	State _____	Zip _____							
Contact Information:											
Relationship (circle appropriate response): Biological Mother/Father Grandmother/Father Adoptive or Foster Parents Physician Health Records Other _____	First _____	M _____	DOB _____	SS# _____							
Last _____	City _____	State _____	Zip _____								
Address:	City _____	State _____	Zip _____								
Place of Work _____	Phone (W) _____										
Phone (H) _____											
WITNESS INTERVIEW											
<b>1</b> Are you the usual caregiver? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	 Name _____ Relationship (ex. aunt) _____										
<b>2</b> Please tell me what happened to the infant.											
<b>3</b> Did you notice anything unusual or different about the infant in the last 24hrs? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes > Describe: _____											
<b>4</b> Has the infant experienced any recent falls or injury? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes > Describe: _____											
<b>5</b> When was the infant last PLACED? _____ Month Day Year _____ Military Time _____ Location (room) _____											
<b>6</b> When was the infant FOUND? _____ Month Day Year _____ Military Time _____ Location (room) _____											
<b>7</b> When was the infant LAST KNOWN ALIVE? _____ Month Day Year _____ Military Time _____ Location (room) _____											
<b>8</b> Explain how you knew the infant was still alive. _____											
<b>9</b> Where was the infant - (Placed) (Just know alive), (Found) (circle appropriate)?  P L F Bassinette <input type="checkbox"/> P L F Beside co-sleeper <input type="checkbox"/> P L F Chair <input type="checkbox"/> P L F Cradle <input type="checkbox"/> P L F Crib <input type="checkbox"/> P L F In a person's arms <input type="checkbox"/> P L F Mattress/box spring <input type="checkbox"/> P L F Playpen <input type="checkbox"/> P L F Portable crib <input type="checkbox"/> P L F Sola/couch <input type="checkbox"/> P L F Stroller/carriage <input type="checkbox"/> P L F Swing <input type="checkbox"/> P L F Other <input type="checkbox"/> P L F Waterbed <input type="checkbox"/>											

SUIDI Sudden Unexplained Infant Death Investigation											
SUPPLEMENTS											
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<b>Body Diagram</b> .....	<b>S-1</b>										
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# Training Content

- Sudden, Unexplained Infant Deaths
- Infant Growth and Development
- Interviewing Psychology
- Interviewing and Investigative Data Collection
- Conducting Witness Interviews
- Conducting Scene Investigations
- Conducting Doll Reenactment
- Developing Pre-Autopsy Report
- Certification of Unexplained Infant deaths

# Training Objectives

- How to use SUIDI Reporting Form
- How to conduct a DSIs
  - Doll re-enactment
- How to interview grieving families and caregivers
- How to recognize difference between SIDs, suffocation, and other SUID
- How to fill out a death certificate

# Future CDC Activities

- Explore state-based system for monitoring SUID
- Conduct additional train-the-trainer academies
- Collaborate with other countries
  - training materials and investigation protocols

# SUID at the CDC

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<http://www.cdc.gov/SIDS.htm>